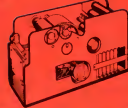


EDP EQUIPMENT FOR MILITARY APPLICATIONS



POTTER INSTRUMENT CO., INC.

HIGH-SPEED
PRINTERS



PERFORATED
TAPE READERS



MAGNETIC
TAPE TRANSPORTS



RANDOM ACCESS
MEMORIES





EDP EQUIPMENT FOR MILITARY APPLICATIONS

Potter Instrument Company is the world's leading independent manufacturer of peripheral data processing equipment for military applications. Extensive research and development programs have resulted in a new generation of military products. These highly advanced state-of-the-art systems offer unparalleled performance and reliability. The design simplicity of Potter military products is reflected in low initial cost and extremely low operating cost. Supported by an extensive logistics network including a world-wide field service organization, Potter guarantees satisfaction.

**AVAILABLE
FROM
ONE SOURCE**

*High-Speed Printers
Perforated Tape Readers
Magnetic Tape Transports
Random Access Memories*

Potter is presently engaged in developing and supplying EDP equipment for use in missile systems, tactical weapon systems and electronic support systems, including POLARIS, PERSHING, TFX, USD-2 DRONE, MTE Consoles, WATERBOY, LCSS, BMEWS (Ballistics Missile Early Warning System), BASE (Basic Automatic Support Equipment) for E2A, A6A, and RA5C.

MILITARIZED HIGH-SPEED PRINTERS

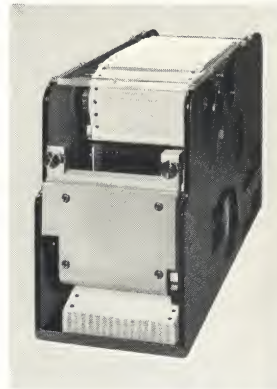
Potter's extensive line of military printers offers unparalleled flexibility and reliability for qualified systems demanded in military applications. Designed specifically for operation in extreme environments, whether the application be ground support, airborne or shipboard. Potter printers have been field-proven in numerous military applications since 1958. Potter's excellence in engineering is evidenced by printer systems still operational after more than 7 years of service.

HSP-3604 HIGH-SPEED MINIATURE SERIAL PRINTER

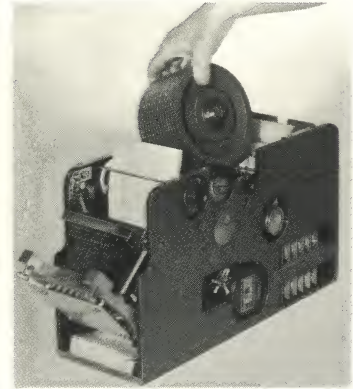
Maintainability, performance and reliability are the significant results of Potter's latest technological breakthrough in high-speed impact printing. This miniaturized (5.4" x 8.8" x 15.9") 29 pound, high-speed serial printer provides a minimum print rate of 12 characters-per-second in a 26 column format with a 64 character complement. A typical message will yield an average print rate of 25 characters per second.

FEATURES

- Quick Replaceable Drum to Facilitate Various Print Formats or Codes (less than 10 seconds replacement time)
- Patented Double-Width Hammers
- Immediate Visibility of Last Line Printed
- Multiple Copy — 3 part Fanfold Paper with Internal Supply and Storage Facilities
- Designed to Meet MIL-E-16400, MIL-T-21200, MIL-Q-9858



*HSP-3604
Miniature Serial Printer*

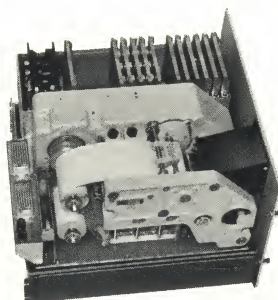


*HSP-3604 Printer
showing Swing Down Hammer
Plate and Ease of drum removal*

- MTBF: Exceeding 2500 Hours
- MTTR: 10 Minutes
- Complete Component Accessibility
- Silicon Electronics include Timing Amplifier, Hammer Drivers, Selection Gates and Paper Feed Driver.

SEE PRODUCT DATA SHEET 3-207

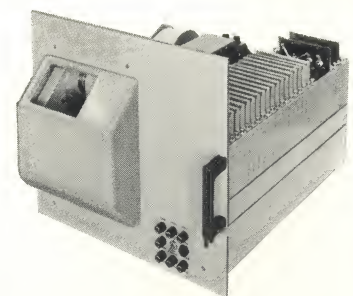
HSP-3601 HIGH-SPEED PARALLEL PRINTER



Designed for continuous ultra-reliable operation in the most extreme military environments, the HSP-3601 High-Speed Parallel Printer provides printout at a conservative print rate of 720 lines per minute in a 26-column format with 16 characters available per column. This unit features adjustment-free hammers and well over 5 years of field-proven operation. The Printer's MTBF exceeds 3000 hours.

SEE PRODUCT DATA SHEET 3-205

HSP-3603 HIGH-SPEED PARALLEL PRINTER



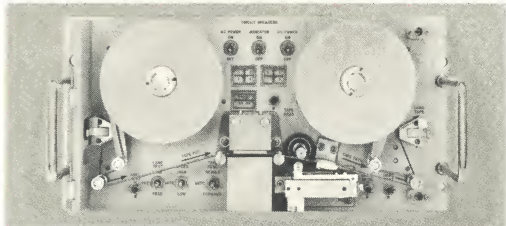
The HSP-3603 unit is a militarized printer system capable of printing at 600 lines per minute in a 12-column format with 16 characters available per column. This printer includes a 400-foot roll paper supply and storage facilities, in addition to a complete line buffer capable of receiving data up to a 95 kc rate. The HSP-3603 features multi configurations, both input and output, including a full array of options to suit virtually any application.

SEE PRODUCT DATA SHEET 3-204

MILITARIZED PERFORATED TAPE READERS

Potter's militarized perforated tape readers were designed and built specifically for military applications. Operation at -25°F through $+135^{\circ}\text{F}$ combined with adjustment-free operation. Field operational since 1959, Potter militarized tape readers offer unsurpassed reliability.

PT-5000 MINIATURE PERFORATED TAPE READER



The industry's most advanced tape reader offers a new concept in reliability and maintainability. The miniaturized (18" W x 9" H x 8" D) 45-pound unit is constructed to the most stringent *high reliability* military specifications, assuring program-free operation at 250 and 500 characters per second. Built-in diagnostic test exercises and indicators, combined with modular construction, allows malfunction isolation without the aid of test equipment. Significant state-of-the-art advances in maintainability have resulted in functional subassemblies that are completely interchangeable *without adjustment* in a matter of minutes. The PT-5000 is documented in accordance with MIL-D-70327, including microfilm per MIL-M-9868.

SPECIFICATIONS

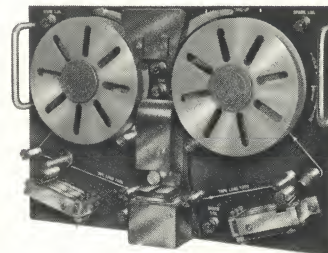
- Dual Speed 250/500 ch/sec (bi-directional motor provides reverse search mode)
- 5-inch Diameter Tape Reels
- Start Time: 18 Milliseconds (time to reach next character)
- Stop Time: Stops before next character at 250 ch/sec
- Rewind Time: less than 2 minutes per 500'
- 1-inch Tape Width
- Power Requirements +12 VDC @ 2.6 amps, -12 VDC @ .280 amps, +28 VDC @ 3 amps, 115 VAC 400 Hz @ 1.1 amps, 3-phase
- Reliability — MTBF: 3000 hours
MTTR: 15 minutes

Environmental Conditions

- Temperature..... High $+135^{\circ}\text{F}$
(operating) Low -25°F
- Shock 25 g's for 40 milliseconds
- Humidity 0 — 95% relative
- RFI MIL-I-6181, MIL-B-5087B,
MIL-E-6051C
- Fungus MIL-E-4970
- Vibration 2 to 20 cps @ 2 g's
20 to 200 cps @ 4 g's
200 to 500 cps @ 2.5 g's

SEE PRODUCT DATA SHEET 2-205

PSR-200 PERFORATED TAPE READER



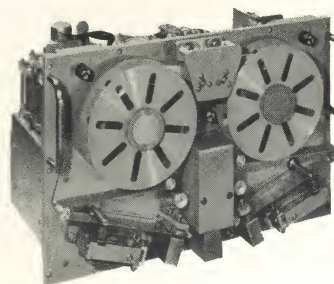
The PSR-200 is a bidirectional, dual-speed photoelectric tape reader. Self-contained regulated power supply, amplifiers and start/stop circuits are completely silicon solid state. Rugged construction permits operation in any attitude throughout an operating temperature range of -25°F to $+135^{\circ}\text{F}$. Featuring complete modular construction and a non-adjustable servo tape brake system, reliability is exemplified with an MTBF exceeding 2500 hours. Qualified to meet stringent environmental requirements of MIL-T-21200C for Class 2 equipment.

SPECIFICATIONS

- Dual Speed, Bidirectional Operation. Synchronous Speed up to 250 ch/sec. Free Running Speed 450 ch/sec.
- 6-inch Diameter Tape Reels • 1" Tape Width
- Start time: 15 milliseconds • Weight: 55 lbs.
- Stop Time: Equipped with the Potter exclusive MONO-BRAKE,TM the unit will stop on the stop character even if the stop command is delayed up to 350 microseconds from the leading edge of the data.
- Rewind Time: Less than 3 minutes per 500 feet
- Dimensions: 16.16" W x 10.88" H x 11.75" D

SEE PRODUCT DATA SHEET 2-211

M3277 PERFORATED TAPE READER



Proven successful in both military and commercial applications, the Model 3277 Perforated Tape Reader is a bidirectional 200 character-per-second photoelectric tape reader. Tape speeds can be increased up to 350 ch/sec.

Self-contained, regulated power supply, amplifiers, and start/stop circuits utilize completely solid state germanium circuitry. Rugged construction permits operation in any position. Except for tape loading, all operations are externally controlled.

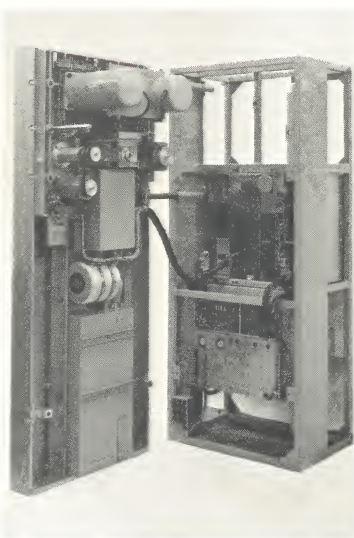
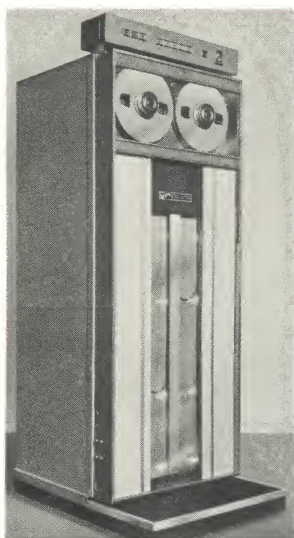
SPECIFICATIONS

- 200 ch/sec, Bidirectional Drive
- 6 inch Diameter Tape Reels • Start Time: 15 milliseconds
- Stops on STOP character • 1" Tape Width
- Rewind Time: less than 90 seconds for 500 feet
- Dimensions: 17" W x 11" H x 11" D • Weight: 56 lbs

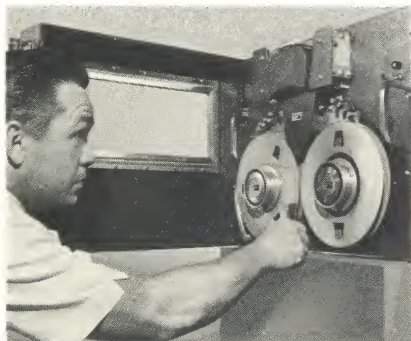
SEE PRODUCT DATA SHEET 2-210

MILITARIZED MAGNETIC TAPE TRANSPORTS

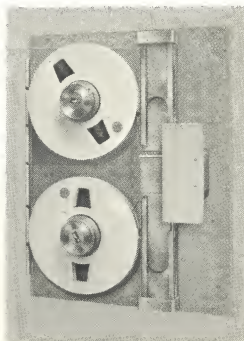
Potter offers the EDP industry's broadest line of tape transports in use by military contractors. The company's newest military EDP contributions include world's most advanced single-capstan magnetic tape transport—the SC-1150M.



SC-1150M Tape Transport Internal Components of SC-1150M



FT-151 Field Tape Transport



Incremental Transport

SC-1150M MAGNETIC TAPE TRANSPORT

Designed to conform to the stringent military requirements demanded for missile bases, shipboard installations, and trailer-mounted applications, the SC-1150M is a high-speed, single-capstan digital tape transport operating at bidirectional tape speeds to 150 ips at 800 bpi. The system is 7- or 9-channel (System 360 or ASCII) compatible and can be adapted to all major computer formats.

Mounted in a rugged, heavy gauge, specially-designed frame, the SC-1150M is designed to withstand 50 g's shock. Test and actual operating hours have established a proven record of dependability and low maintenance. MTBF is in excess of 1,000 hours with 10⁹ start/stop operations before replacement parts are needed. Complete documentation and logistics programs, recommended preventive maintenance schedule and field support are provided. SEE PRODUCT DATA SHEET 1-215M

TRANSPORTS AND SYSTEMS

Potter offers digital magnetic tape transports that operate one-character-at-a-time, on command, with constant spacing or at fixed tape speeds to 150 ips. Packing densities to 800 bpi, NRZ recording, or 1600 bpi phase-modulated recording.

Tension arm, vacuum-column, single capstan and incremental types are available, as well as a complete line of components and accessories, including read/write amplifiers, magnetic heads, drive electronics, manual controls, QUICK-LOCK^(TM) hubs and cabinets.

SEE PRODUCT DATA SHEET 1-207 (FIELD TAPE TRANSPORT), 1-202 and 1-212 (INCREMENTAL TAPE TRANSPORTS)

RAM® DUAL-CARTRIDGE RANDOM ACCESS MEMORY

The RAM is a cartridge-loaded, random access system for use with medium and low cost digital computer systems. Typical applications are: inventory control, computer programming, real-time data processing, and mathematical and scientific analyses . . . wherever rapid access to a volume of information is required.

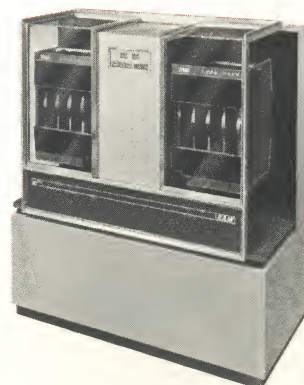
The RAM, representing the first successful use of magnetic tape, is a fast access device having an on-line capacity in excess of 50 million bits, at an average access time of less than 90 milliseconds.

Comparisons between the RAM and other machines show typical operations being accomplished in half the usual time, with cartridge capacity doubled and cost per bit stored reduced to one quarter. In addition, vulnerable recording discs have been replaced by highly shock-resistant magnetic tape sealed in rugged Tape Pack cartridges.

PRIMARY SPECIFICATIONS

On-line Storage Capacity	50.2 million bits
Cartridge Capacity	25.1 million bits
Average Access Time	87.5 ms
Average Check-Read-After-Write Cycle Time	88.0 ms
Data Transfer Rate	600 kc/s
Tape Speed	588 inches/sec

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The TLM-4550 RAM accepts two Potter Model ACC-8601 Tape Pack Cartridges. The tape loop assembly is totally enclosed within a dust-tight, rigid, aluminum case. An aluminum-on-plastic tambour door on the end of the cartridge case provides passage for the drive mechanism when in use. The absence of close tolerance internal fittings avoids misalignment by careless handling, and the tape loops are inherently not subject to deformation and damage by shock and vibration.

SEE PRODUCT DATA SHEET 1-103

POTTER WORLD-WIDE FIELD SERVICE AND LOGISTICS PROGRAM

Repair centers in strategic locations within the continental United States and abroad have been established to support the entire Potter product line.

Staffed by highly-trained field representatives, these repair centers are equipped to effect on-site installation of equipments and to perform quality repair, maintenance and overhaul.

Supplementing this capability, if a customer prefers to provide his own equipment support, Potter has established standard instruction courses to train customer personnel, either at Potter or in the field.

A Spare Parts Department, backed up by an extremely large inventory and streamlined order processing, is available for customer convenience and economy. This inventory permits the customer to realize virtual elimination of downtime as well as savings on spare parts dollars by offering expeditious delivery for replaceable parts. Delivery is available in 24 hours to meet customer emergency requirements — within 72 hours for standard parts under normal conditions. Potter also offers provisioning and logistics capabilities to meet all existing military specifications.

The Potter field service and logistics program is one of the finest in the EDP equipment industry. With reliable, quality-engineered equipment, supported by comprehensive field service, Potter guarantees satisfaction.

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POTTER PLANTS Tape transport production is carried on in this modern 62,000 sq. ft. plant on Sunnyside Boulevard, Plainview, New York (below, left). Building also houses corporate offices, sales, engineering and research groups.

East Bethpage Road plant (below, right), completed in 1963, produces high-speed printers. A third plant in Luquillo, Puerto Rico, manufactures magnetic and photoelectric recording and playback heads. Total manufacturing space in all Potter plants exceeds 110,000 sq. ft.



POTTER INSTRUMENT COMPANY, INC.

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